

CALIFORNIA DEPARTMENT OF TRANSPORTATION ORGANIC ZINC RICH PRIMER, MATERIAL AUTHORIZATION PROCEDURE AND ACCEPTANCE CRITERIA

All organic zinc rich primers to be used by the State of California Department of Transportation shall be on the Caltrans Authorized Material List (AML) before incorporation into any construction project. This Authorization and Acceptance Criteria establishes procedures to ensure that the material meets the performance requirements of SSPC: The Society for Protective Coatings, Coating Specification No.29, Zinc Dust Pigmented Primer, Type II, before inclusion on the Caltrans AML. Four hot rolled steel panels, measuring 4 x 6 x 0.25 inches, conforming to SSPC-PA15 requirements, are prepared and coated according to the coating manufacturer's written instructions. Test panels are allowed to cure for a minimum of 7 days prior to testing. The three best panels are exposed for 5040 hours of cyclic corrosion/UV by ASTM D 5894, then evaluated for performance in accordance with SSPC-Paint 29, Tables-1,2

I. Authorization of Organic Zinc Rich Primers requires the following:

1. Manufacturer provides:

- A. Letter of intent specifying the type of product, applications and contact information.
- B. Authorized Material List Submittal Form TL-9502,
<http://cefs.dot.ca.gov/jsp/forms.jsp>
- C. Product brochure with detailed performance information and properties.
- D. Material Safety Data Sheets including chemical content and hazards.
- E. Evaluation reports and test results from a 3rd party independent testing laboratory, for each product submitted for authorization.

2. Performance and acceptance criteria:

<u>Coating Type</u>	<u>Exposure Type</u>	<u>Exposure Time</u>	<u>Rust Rating, SSPC VIS-2/ASTM D610</u>	<u>Blister Rating, ASTM D714</u>	<u>Average Scribe Undercutting, SSPC-PA 16</u>	<u>Adhesion, ASTM D4541, Method E, Type V tester, min</u>
Organic zinc, Type II	ASTM D5894 Cyclic/QUV	5040 hrs.	All 10 (slight rust in scribe)	All 10 (No blistering)	Max 3.2 mm (1/8 inch)	4.1 Mpa (600 psi)

3. Send the required paperwork to the Caltrans Transportation Laboratory in Sacramento, CA. all submittals go directly from the AML Product Coordinator to the AML Administrator.

California Department of Transportation Laboratory
Materials Engineering and Testing Services – MS#5
Chemical Testing Branch
5900 Folsom Boulevard
Sacramento, CA 95819

II. Caltrans will:

- A. Ensure all required documentation is received.
- B. Review the technical information.
- C. Upon evaluation of the technical information and test results, issue an acceptance letter valid for 5 years or a rejection letter.
- D. Update the Caltrans Authorized Material List, if applicable.

III. Reauthorization:

- 1. Manufacturers should contact the Chemical Testing Branch 3 months prior to their products listed expiration date to schedule reauthorization.

If you have questions about the, ORGANIC ZINC RICH PRIMER, MATERIAL AUTHORIZATION PROCEDURE AND ACCEPTANCE CRITERIA, contact Barry Marcks at (916) 227-7918 or at Barry.Marcks@dot.ca.gov.